

UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF OHIO  
WESTERN DIVISION

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The Estate of Roger D. Owensby : Case No. 1:01-cv-769  
Plaintiff, : (Judge Spiegel)  
-vs- :  
CITY OF CINCINNATI, et al., : CIVIL RULE 56(f)  
Defendant. : AFFIDAVIT OF  
 : TOM S. NEUMAN, M.D.

STATE OF OHIO }  
 } ss:  
HAMILTON COUNTY, OHIO }

Now comes Affiant, Tom S. Neuman, M.D. and being duly sworn,  
deposes and states as follows:

1. My name is Tom S. Neuman. I am the Associate Director of the Emergency Department for the University of California, San Diego. I am Board Certified by the American Board of Medical Specialties in Emergency Medicine, Internal Medicine and Occupational Medicine. In addition, I hold sub-specialty certifications in Pulmonary Disease and Undersea and Hyperbaric Medicine.
2. My colleagues and I have done extensive research concerning the cardiopulmonary effects of various restraint procedures. I have had training in pulmonary physiology and data analysis, thus, I am qualified to both analyze and criticize the literature in this field.
3. I have been the Editor in Chief of a peer reviewed scientific journal further augmenting my experience in evaluating the quality and limitations of medical literature as well as the underlying scientific experiments associated with that literature.
4. I am a member of the San Diego County Coroner's Committee for the Investigation of Diving Fatalities and thus am familiar with the complexities associated with attempting to find a cause of death and/or

mechanism of death especially in situations where no specific anatomic findings are present to point to a definitive cause.

5. I am an author on a number of peer reviewed scientific papers that examine the physiologic effects of various restraint procedures.
6. For further details of my background and experience I refer you to my c.v. which is attached to this report and which is true and accurate to the best of my knowledge.
7. My opinions are based upon the following material:
  1. Autopsy report of Mr. Owensby
  2. Affidavit of Dr. Wetli
  3. Report of Dr. Wecht
  4. Deposition of Mr. Brazile
  5. Deposition of Mr. Caton
  6. Deposition of Mr. Hasse
  7. Deposition of Mr. Hunter (I and II)
  8. Deposition of Mr. Jorg
  9. Deposition of Mr. Sellers
  10. Deposition of Mr. Spellen
  11. Deposition of Dr. Schultz (I and II)
  12. Plaintiff's Motion for Summary Judgment (and supporting documents)
  13. Deposition of Mr. Coburn
8. Understand that opinions are always based upon the information that is available. Should further information become available that materially alters the facts as I understand them, I must reserve the right to modify my opinions.
9. I have reviewed material concerning the death of Mr. Owensby and am able to provide an opinion by a reasonable degree of medical probability concerning what role, if any, the actions of the police officers involved in placing him in custody may have played in his death and whether CPR, if it had been given immediately upon the development of his cardiac arrest, would have resulted in a different outcome.
10. I am also now in a position to comment upon the deposition and opinions of Dr. Schultz.

11. Although there are a variety of things that happened in the sequence of events that ultimately culminated in Mr. Owensby's death, the most important of those facts are as follows:

1. An interaction between Mr. Owensby and the Cincinnati police took place on November 7, 2000
2. Mr. Owensby ran from the police
3. Mr. Owensby was tackled
4. At 1947 a call for assistance was made
5. A struggle between Mr. Owensby and the police ensued. An unknown amount of weight was placed upon him, some on his lower back, some on his buttocks, some on his upper back, and a knee on his shoulder blade.
6. At 1949 he was handcuffed and all weight was off his back

12. At this point there is a divergence in the testimony to the degree that I can no longer be reasonably sure as to the sequence of events. There are however two general scenarios that are described which I relate below.

1. Mr. Owensby was unconscious, head forward, not moving with his feet dragging when he was placed into the police vehicle, or
2. Mr. Owensby walked and/or lifted his legs off the ground and resisted being placed in the car.

Ultimately, after he had been placed in the police car, it was noticed that Mr. Owensby's appearance in the back of the police cruiser was not good. He was removed and found to be in cardiac arrest. Resuscitative efforts were unsuccessful.

13. In lay terms, asphyxia is basically death due to suffocation or death due to oxygen deprivation. When one is prevented from breathing, a predictable sequence of events takes place. The knowledge of the details of this sequence of events is based upon animal studies, our understanding of normal human physiology, observations of other pathologic conditions, and (not to be ignored) common sense. Perhaps most importantly, the process of asphyxiation takes a considerable period of time to occur and progresses in an easily understood fashion. The first organ system to demonstrate cessation of function is the brain. This is because the brain is the organ most sensitive to oxygen deprivation. The initial failure of function is manifested by loss of consciousness. If even a minimal amount of breathing can take place, the time to cessation of brain function will take longer. It must be emphasized that although the victim of suffocation loses

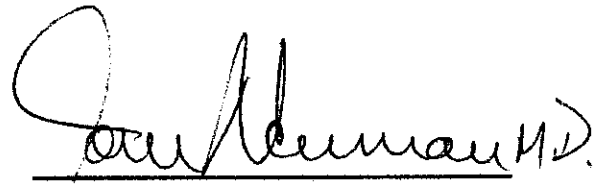
consciousness, the heart continues to beat. The heart continues to beat because it is less sensitive to oxygen deprivation than the brain and therefore it continues to function for a substantially longer period when faced with oxygen deprivation. Indeed, it will take several more minutes for the heart to stop beating in the setting of simple suffocation. In general, this whole process, from the initial complete cessation of breathing to death, will take a minimum of 5 minutes and that is only if the victim is unable to breathe at all. Should there be any breathing at all, the whole process will take considerably longer.

14. The reason these processes occur over a period of several minutes is well understood. Basically the body has significant oxygen stores to allow the organs to function even in the absence of breathing. If this were not the case you would not be able to hold your breath nor to swim a length of a pool underwater. These oxygen stores are most importantly the residual air in your lungs and the oxygen contained in your blood. (Your body only uses about 25% of the oxygen in your blood with each complete pass around the body).
15. Given the time logs (transcription of the radio logs) of the events, it is highly unlikely that Mr. Owensby died of mechanical asphyxiation. First of all, it defies logic to believe that in a struggle with several police officers that Mr. Owensby was not able to breathe at all. But even if he were not able to breathe at all, two minutes is simply not enough time to asphyxiate to death.
16. Dr. Schultz is correct in his deposition statements that it takes "minutes" to asphyxiate, but two minutes is simply insufficient.
17. In large series of drowning victims (which is a form of asphyxiation that should take less time than simple mechanical asphyxiation), it is estimated that it takes approximately 5 minutes for cardiac arrest to occur. In animal models of simple suffocation the time course is considerably longer. Regardless, two minutes is a time period that many individuals can hold their breath. It is simply too short a period to die of asphyxiation.
18. Two possible scenarios outlined above are as follows:  
  
The first scenario is in keeping with Dr. Schultz' interpretation of the events (I underscore events, rather than his interpretation of the cause of death). If as Dr. Schultz has opined, Mr. Owensby was in fact dead before he was placed in the cruiser, he died during the two minute period of the struggle with the police. As this is an insufficient time to asphyxiate, one must seek an alternate cause of death. The only remaining possibility is that indeed Mr. Owensby did die of a sudden cardiac arrest. Given his

height of 5'7, a heart weight of 380 grams is certainly at the upper limit of normalcy if not frankly, abnormal. As an enlarged heart is a risk factor for sudden cardiac death, this remains the most likely diagnosis in this case.

19. The second scenario would indicate that Mr. Owensby was not only alive, but actively resisting being placed in the police cruiser after being handcuffed and arrested. This is in keeping with some of the testimony (but clearly at odds with other testimony) and is also in keeping with the examination of Mr. Owensby's boots which did not reveal any scuffing consistent with having been dragged. If this is the case, Mr. Owensby died while he was in the back of the police cruiser. In this regard Dr. Schultz is wrong. People do "simply die." Of course, they do not die from asphyxia in such circumstances, but rather again a sudden cardiac death is the most likely event given the autopsy results and the lack of any other plausible cause of death.
20. Finally, I address the issue of whether more prompt CPR would have resulted in Mr. Owensby's survival. This is an extremely easy question to answer from an epidemiological point of view. Notwithstanding the expectations of the public, cardiac arrest is still a highly lethal event. Depending upon the exact paper one reads there are varying survival rates; however, with the exception of a few small series and other series in which only a selected subset of victims are examined, the general survival rate from cardiac arrest (i.e. discharge from the hospital neurologically intact), remains very poor. Thus regardless of whether CPR was given, it is more likely than not, to a reasonable degree of medical probability, that Mr. Owensby would have died.
21. In summary then, my opinions, to a reasonable degree of medical probability, are that Mr. Owensby did not die of mechanical asphyxiation and that his death was due to a sudden (primary) cardiac arrhythmia. Furthermore, CPR, regardless of when it would have been instituted, would not, to a reasonable degree of medical probability, have made it more likely than not that he would have survived.

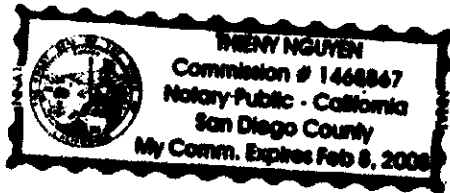
Further, Affiant sayeth naught.



Tom S. Neuman, M.D.

Sworn and subscribed in my presence this 25 day of february

                    , 2004.



Henry Nguyen  
Notary Public, State of California  
My commission expires